What Is Claimed Is:

1. A device for determining parameters of a blind void, the device comprising:

an elongated rigid rod;

an actuator extending lengthwise of said rod and slidably movable relative to said rod, said actuator having a distal end for insertion into the void;

a first flexible element fixed at one end thereof to said rod proximate the distal end of said rod;

a second flexible element fixed at one end thereof to said rod and proximally removed from the distal end of said rod and from said first element;

wherein movement of said actuator is operative to cause equal movements of the distal end portions of said first and second elements, to cause said first element to bulge outwardly from said rod to engage interior walls of the void and to cause said second element to bulge outwardly in a configuration duplicative of said first element bulge, the second

LMT-66

5

10

15

element being outside of the void and subject to observation.

2. The device in accordance with claim 1 wherein said actuator is engageable with distal end portions of said first and second elements to cause the movements of said distal end portions of said elements and thereby the bulging outwardly of said elements.

10

15

5

3. The device in accordance with claim 1 wherein said actuator comprises an end piece fixed to the distal end of said actuator and engageable with a distal end of said first flexible element, and a projection engageable with a distal end of said second flexible element, such that the distal ends of the elements are moved toward the fixed ends of the elements to cause portions of the elements between the distal and fixed ends thereof to bulge outwardly.

20

4. The device in accordance with claim 1 wherein said rod is provided with a grip portion at a proximal

end thereof and said actuator is provided with a manipulable portion proximate a proximal end of said actuator and proximate the grip portion.

5

The device in accordance with claim 1 wherein said elements each comprise at least one strip of flexible material.

10

15

The device in accordance with claim 1 wherein said actuator comprises a rigid elongated member.

7. A device for determining parameters of a blind void, the device comprising:

an elongated rod having a proximal end and a distal end;

an actuator slidably mounted on said rod for movement distally and proximally on said rod;

surface of said rod opposite from said actuator, said first flexible element being disposed at a distal end

of said rod and said second flexible element being

first and second flexible elements fixed to a

disposed proximally of said first element, said elements being substantially identical to each other;

first and second engagement members fixed to said actuator and engageable with distal ends of said first and second elements, respectively;

wherein proximal movement of said actuator relative to said rod causes said engagement members to contact the distal ends of said elements to bulge said elements outwardly to produce first and second identical bulges, one of the bulges being exposed for observation.

8. The device in accordance with claim 7 wherein said rod comprises first and second plates of equal configuration and size and extending parallel to each other, and said actuator is slidably disposed between said first and second plates, each of said plates having the first and second flexible elements fixed thereon on outwardly facing walls thereof, and the engagement members engage the distal ends of all of

20

5

10

said flexible elements to cause bulging of all of said elements simultaneously.

9. The device in accordance with claim 8 wherein said rod is provided with a grip portion at a proximal end thereof and said actuator is provided with a manipulable portion proximate the grip portion, such that an operator can hold said rod and move said actuator with one hand.

10. A device for determining the size of a spinal disc void created by removal of nucleus pulposus, such that an artificial nucleus implant may be properly sized before attempted implantation

thereof, the device comprising:

an elongated rod;

an actuator extending lengthwise of said rod and slidably movable relative to said rod, said actuator having a distal end for insertion into the disc void;

5

10

a first flexible element fixed at one end to said rod proximate a distal end of said rod for insertion into the disc void;

a second flexible element fixed at one end to said rod and removed from said first element and the distal end of said rod to remain outside of the disc void; and

engagement members mounted on said actuator, each engagement member upon movement of said actuator, being engageable with a free end of one of said elements to bulge outwardly said first element in the disc void and to bulge outwardly said second element to the same extent as the first element, such that the bulge of the second element is available to inspection and replicates the bulge of said first element.

11. The device in accordance with claim 10 wherein said engagement members comprise an end piece fixed to a distal end of said actuator and a block fixed to a side of said actuator, said end piece being engageable with the free end of said first element to

5

10

15

cause said first element to bulge outwardly in the disc void, and said block being engageable with the free end of said second element to cause said second element to bulge outwardly.

5

12. The device in accordance with claim 11 wherein said rod comprises first and second plates extending parallel to each other, and said actuator comprises a plate slidably disposed between the rod first and second plates.

10

15

20

wherein said rod comprises two parallel plates and said actuator is disposed between said plates, said first flexible element being fixed on an outwardly facing surface of a first of the plates, another first flexible element being fixed on an outwardly facing surface of a first of the plates, another first flexible element being fixed on an outwardly facing surface of a second of the plates, said end piece being engageable with the free ends of both first elements simultaneously, said second flexible element being fixed on an outwardly facing surface of the

first of the plates, another second flexible element being fixed on an outwardly facing surface of the second of the plates, said block being disposed on an outwardly facing surface of the first plate, and another block being disposed on an outwardly facing surface of the second of the plates.

- 14. The device in accordance with claim 13 wherein said blocks are fixed to said actuator by connecting pins which extend through slots in the plates.
- 15. The device in accordance with claim 13
 wherein said rod includes a grip portion at a proximal
 end of said rod, and said actuator includes
 manipulation structure proximate the grip portion,
 such that the device is adapted to be held and
 operated by one hand of an operator.
- 16. The device in accordance with claim 15 wherein the manipulation structure comprises a

5

10

15

cross-bar extending width-wise of said said actuator and through slots in the plates.

17. A method for determining parameters of a blind void, the method comprising the steps of: providing a device comprising:

an elongated rigid rod;

a first flexible element fixed at one end thereof to said rod proximate a distal end of said rod;

a second flexible element fixed at one end thereof to said rod and proximally removed from the distal end of said rod and from said first element; and

an acutator extending lengthwise of said rod and engageable with distal end portions of said first and second elements;

inserting the distal end of said actuator and said first element into the void;

moving said actuator to cause movements of the distal end portions of said first and second elements,

5

10

15

to cause said first element to bulge outwardly to engage interior walls of the void, and to cause said second element to bulge outwardly in a configuration duplicative of the first element bulge, the second element being outside of the void; and

determining from the size of the second element the size of the first element and thereby the void.

18. The method in accordance with claim 17 wherein:

said device includes a grip portion disposed at a proximal end of said rod, and a manipulable portion disposed on said actuator; and

the step of moving said actuator comprises squeezing the grip portion towards the manipulative portion.

19. A method for determining the size of a spinal disc void created by removal of nucleus pulposus, such that an artificial nucleus implant may

5

10

15

be properly sized before attempted implantation thereof, the method comprising the steps of:

providing a device comprising:

first and second plates disposed side by side and parallel to each other;

a distal flexible element fixed at one end thereof to each of said plates;

a proximal flexible element fixed at one end thereof to each of said plates, said proximal elements being proximally removed from said distal elements; and

an actuator extending slidably between said plates and having portions thereof engageable with free distal end portions of said flexible elements;

inserting a distal end of said actuator and said distal elements into the spinal disc void;

moving said actuator to cause the actuator engageable portions to engage the free distal end portions of said elements to cause said distal elements to bulge outwardly to engage interior walls of the void and to cause said proximal elements to

5

10

15

bulge outwardly in a configuration duplicative of the distal elements' bulges, the proximal elements being outside of the void; and

observing the size of the bulged proximal elements to determine the size of the bulged distal elements, and thereby the size of the void.

- 20. The method in accordance with claim 19 wherein observing the bulged proximal elements includes at least one of visual observation and automatic data gathering and read-out.
- 21. The method in accordance with claim 19 wherein said actuator is oriented so as to determine the size of the void in a substantially horizontal direction.
- 22. The method in accordance with claim 19 wherein said actuator is oriented so as to determine the size of the void in a substantially vertical direction.

5

10

15